AMENDMENTS TO THE SPECIFICATION

**Please replace page 1, lines 1-8, with the following amended lines:**

OPTICAL IMAGE SCANNER WITH ~~COLOR AND INTENSITY~~ ILLUMINATION COMPENSATION DURING LAMP WARMUP

~~FIELD OF INVENTION~~

~~This invention relates generally to image scanners and more specifically to compensation for changes in intensity and color during warm up of a lamp used for image scanning~~.

**Please replace the paragraph beginning at page 2, line 5, with the following paragraph:**

Image scanners may wait open-loop for a worst case lamp warm-up time before initiating a scan. For typical light sources, the required time is on the order of tens of seconds. In general, such a delay adds unnecessary additional time to every scan. Such a delay is particularly inappropriate if the lamp is already warm. Alternatively, some image scanners leave the lamp on continuously. Fluorescent lamps for image scanners are relatively low power, so that continuous usage does not waste much power, but consumers may be concerned about the waste of power and possible reduced lifetime. Some image scanners overdrive the lamp initially to decrease the warm-up time (see U.S. Patent Number 5,907,742; see also U.S. Patent Number 5,914,871). In '742, the lamp current is also maintained at a low level between scans to keep the lamp warm. In some image scanners, the lamp is periodically turned on for a few minutes every hour during long periods of inactivity (see U.S. Patent Number 5,153,745). In some scanners, the lamp is

enclosed by a heating blanket (except for an aperture for light emission), which keeps the lamp continuously warm (see U.S. Patent Number 5,029,311). Another approach is to monitor a lamp parameter during warm-up, and delay scanning until the parameter is stable. For example, see U.S. Patent Number 5,336,976, in which power to the lamp is monitored, and scanning is delayed until power stabilizes.

**Please delete line 21 on page 4 ("SUMMARY OF THE INVENTION").**

**Please delete the paragraph beginning at page 4, line 23, and continuing to page 5, line 6.**

**Please replace the paragraph beginning at page 6, line 7, with the following paragraph.**

In figure 1, a document 100 is positioned face down on a transparent platen 102. A pair of lamps 104 are partially enclosed in a reflector 106. A photosensor ~~array~~ assembly 108 receives light from a narrow scanline on the document 100. Light ray 110 represents light from the lamps 104, diffusely scattered from the document 100, through a focusing lens 112, onto an array of photosensors 114. The scanner illustrated in figure 1 also includes a calibration strip 116. Light ray 118 represents light from the lamps 104, diffusely scattered from the calibration strip 116, through a lens 120 (optional), through the focusing lens 112, and onto an array of photosensors 122. The lamps, photosensors, lenses, and calibration strip 116 are all mounted in or on a moveable carriage 124. For scanning, the carriage 124 moves relative to the document 100, as depicted by arrows 126. Note, in particular, that a separate array of photosensors 122 is provided for monitoring light from the calibration strip 116. Note also that the calibration strip 116 travels with the carriage 124, in a fixed spatial relationship relative to the photosensor array 122, and relative to lamps 104, so that the photosensor array 122 receives light

continuously from the calibration strip 116 during scanning. Scanning can start as soon as the lamp provides sufficient light for scanning, without waiting for the lamp to stabilize. It is not necessary to keep the lamp on, or to keep the lamp warm. In addition, the system provides better scanning accuracy, by providing better compensation (entire length of scanline, and color) during a scan.